



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	Varathane® Liquid Plastic Exterior Wood Finish®	Code	Liquid Plastic Exterior Wood Finish® Products
Supplier	The Flecto Company, Inc. 1000 45th Street Oakland, California 94608	MSDS#	June 1998
Synonym	92-03, 93-03 VOC <450 g/l (3.8 lbs/gal)	TSCA Inventory	All raw materials are listed.
Trade name	Varathane® Liquid Plastic Exterior Wood Finish®	Validation Date	6/16/98
Material Uses	Use on boats, patio furniture, exterior doors, etc.	Print Date	7/24/98
Manufacturer	The Flecto Company, Inc. 1000 45th Street Oakland, California 94608	In case of Emergency	Emergency phone: 800-255-3924 For Information Call: 800-635-3286

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	TLV/PEL	LC ₅₀ /LD ₅₀
Mineral Spirits	064742478	<27.0	TWA: 100 (ppm)	Not available.
Light aromatic solvent naphtha (petroleum)	064742956	<10.0	TWA: 50 (ppm) from OSHA	Not available.
Xylene	001330207	<1.0	TWA: 100 CEIL: 150 (ppm) TWA: 435 CEIL: 655 (mg/m ³)	ORAL (LD50): Acute: 4300 mg/kg [Rat]. 6100 mg/kg [Rat].
Primary amyl alcohol	000071410	<5.0	Not available.	Not available.
Methyl ethyl ketoxime	000096297	<0.5	Not available.	Not available.
Trimethyl Benzene	000095636	<0.3	TWA: 25 CEIL: 35 (ppm) TWA: 125 CEIL: 170 (mg/m ³)	Not available.
Ethylbenzene	000100414	<2.0	TWA: 100 CEIL: 125 (ppm) TWA: 435 CEIL: 545 (mg/m ³)	ORAL (LD50): Acute: 3500 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].

Section 3. Hazards Identification

Emergency Overview	May cause eye irritation. May cause skin irritation. May be harmful or fatal if swallowed.
Potential Acute Health Effects	Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).
Potential Chronic Health Effects	Non-sensitizer for skin. Non-permeator by skin. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.
Target Organs:	Not available.
Routes of Entry	Eye contact. Inhalation. Ingestion.
Medical Conditions Aggravated by Overexposure:	There is no known effect from chronic exposure to this product. Repeated or prolonged exposure is not known to aggravate medical condition.
Signs and Symptoms of Overexposure:	Not available.

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Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used. DO NOT use an eye ointment. Seek medical attention.
Skin Contact	Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. COLD water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Hazardous Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Hazardous Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation.
Ingestion	DO NOT induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Hazardous Ingestion	No additional information.

Section 5. Fire and Explosion Data

Flammability of the Product	Combustible.
Auto-Ignition Temperature	The lowest known value is 218°C (424.4°F) (Mineral Spirits).
Flash Points	CLOSED CUP: 40.5°C (104.9°F). (Setaflash.).
Flammable Limits	The greatest known range is LOWER: 1.1% UPPER: 6% (Mineral Spirits)
Products of Combustion	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂)
Fire Hazards in Presence of Various Substances	Flammable in presence of open flames and sparks.
Explosion Hazards in Presence of Various Substances	No danger known.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemicals, CO ₂ , water spray or foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.
Special Remarks on Fire Hazards	Combustible.
Special Remarks on Explosion Hazards	No additional remark.

Section 6. Accidental Release Measures

Small Spill	Mop up, or absorb with an inert DRY material and place in an appropriate waste disposal container.
Large Spill	Combustible material. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7. Handling and Storage

Handling	After handling, always wash hands thoroughly with soap and water.
Storage	Keep container dry. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Lab coat. Vapor respirator. Be sure to use a MSHA approved respirator or equivalent. Gloves (impervious). Safety glasses.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Chemical Name or Product Name	CAS #	Exposure Limits
Mineral Spirits	064742478	TWA: 100 (ppm)
Light aromatic solvent naphtha (petroleum)	064742956	TWA: 50 (ppm) from OSHA
Xylene	001330207	TWA: 100 CEIL: 150 (ppm)
		TWA: 435 CEIL: 655 (mg/m ³)
Primary amyl alcohol	000071410	Not available.
Methyl ethyl ketoxime	000096297	Not available.
Trimethyl Benzene	000095636	TWA: 25 CEIL: 35 (ppm)
		TWA: 125 CEIL: 170 (mg/m ³)
Ethylbenzene	000100414	TWA: 100 CEIL: 125 (ppm)
		TWA: 435 CEIL: 545 (mg/m ³)

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.	Odor	Hydrocarbon.
Molecular Weight	Not applicable.	Taste	Not available.
pH (1% soln/water)	Not available.	Color	Light straw.
Boiling/Condensation Point	Weighted average: 159.44°C (319°F)		
Melting/Sublimation Point	Not available.		
Critical Temperature	Not available.		
Specific Gravity	0.92 (Water = 1)		
Vapor Pressure	Weighted average: 2.45 mm of Hg (@ 20°C)		
Vapor Density	The highest known value is 4.9 (Air = 1) (Mineral Spirits).		
Volatility	<60% (v/v).		
Odor Threshold	Not available.		
Evaporation rate	Not available.		
Viscosity	Not available.		
Water/Oil Dist. Coeff.	The product is more soluble in oil.		
Ionicity (in Water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Soluble in mineral spirits.		
Physical Chemical Comments	Not available.		

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Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	No additional remark.
Incompatibility with various substances	None known.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	No.

Section 11. Toxicological Information

Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of ingestion.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional remark.
Special Remarks on other Toxic Effects on Humans	No additional remark.


Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste information	Use product or recycle. Consult local or regional authorities.
Waste stream	Consult local or regional authorities.

Section 14. Transport Information

DOT Classification	DOT CLASS 3: Combustible liquid with a flash point greater than 37.8°C (100°F). Not regulated for highway travel; Considered flammable for air or ocean transport. UN1263		
Proper Shipping Name	Paint		
DOT Identification Number	Not regulated for highway travel; Considered flammable for air or ocean transport. UN1263		
Packing Group	II		
Maritime transportation	Not available.		

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**Varathane® Liquid Plastic Exterior
Wood Finish®**

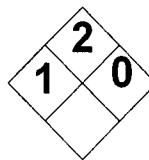
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Hazardous Substances Reportable Quantity	Not available.
Special Provisions for Transport	No additional remark.
TDG Classification	TDG CLASS 3: Flammable liquid.
ADR Classification	ADR CLASS: Flammable liquid D. Non-toxic and non-corrosive liquid with a flash point between 21°C (70°F) and 100°C (212°F).
IMDG Classification	IMDG CLASS 3: Flammable liquid.
IATA Classification	IATA CLASS 3: Flammable liquid.

Section 15. Regulatory Information

Federal and State Regulations	<p><u>SARA 302/304/311/312 extremely hazardous substances:</u></p> <p>Product(s): (Benzotriazol-(2h) yl-2)-2 di-tert-pentyl-4,6 phenol</p> <p><u>SARA 311/312 MSDS distribution - chemical inventory - hazard identification:</u></p> <p>3-iodo-2-propynyl butyl carbamate;</p> <p><u>SARA 313 toxic chemical notification and release reporting:</u></p> <p>Xylene; Diethylene Glycol Monomethyl Ether; Dipropylene glycol monomethyl ether; Glycol Ether; 3-iodo-2-propynyl butyl carbamate; Ethylbenzene;</p> <p><u>CERCLA hazardous substances:</u></p> <p>Dipropylene glycol monomethyl ether; Glycol Ether; 3-iodo-2-propynyl butyl carbamate;</p>								
Other Classifications	<table><tr><td>WHMIS (Canada)</td><td>WHMIS CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). WHMIS CLASS D-2B: Material causing other toxic effects (TOXIC).</td></tr><tr><td>Canadian Regulatory Lists</td><td><u>CEPA DSL:</u> Product(s): Mineral Spirits, Xylene</td></tr><tr><td>DSCL (EEC)</td><td>R11- Highly flammable.</td></tr><tr><td>International Regulatory Lists</td><td>No products were found.</td></tr></table>	WHMIS (Canada)	WHMIS CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). WHMIS CLASS D-2B: Material causing other toxic effects (TOXIC).	Canadian Regulatory Lists	<u>CEPA DSL:</u> Product(s): Mineral Spirits, Xylene	DSCL (EEC)	R11- Highly flammable.	International Regulatory Lists	No products were found.
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Canadian Regulatory Lists	<u>CEPA DSL:</u> Product(s): Mineral Spirits, Xylene								
DSCL (EEC)	R11- Highly flammable.								
International Regulatory Lists	No products were found.								

Section 16. Other Information

HMIS (U.S.A.)	Health Hazard	1	National Fire Protection Association (U.S.A.)	Health		Fire Hazard
	Fire Hazard	2				Reactivity
	Reactivity	0				Specific hazard
	Personal Protection	G				
References	Primarily MSDS information on components.					
Other Special Considerations	VOC <450 g/l (3.8 lbs/gal); Typically packaged in metal (steel) ½ pint, quart and gallon containers.					
Validated by Ken Trautwein on 6/16/98.			Verified by Jim Tuck.			
			Printed 7/24/98.			

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**Varathane® Liquid Plastic Exterior
Wood Finish®**

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Emergency phone:

800-255-3924

For Information Call:

800-635-3286

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.